THE SPECTRE OF THE MACHINE

Kathryn Ptacek
Staff Writer
User Services
Computing Services and Information Systems
University of New Mexico Computing Center
2701 Campus Blvd. NE
Albuquerque, NM 87131
(505) 277-2761

ABSTRACT

There exists a psychological fear of com-
puters and that fear is expressed in the
literature of our society. The basis of
this fear, viewed in three related aspects,
is the populace's misunderstanding of the
machine's function and abilities and capa-
bilities.

Literature is the double mirror of society.
It reflects the attitudes, trends and mores
prevalent in our society. This is the
Mirror of Reality. There exists a second
mirror, however, the Mirror of Illusion and
it is this mirror which proves dangerous to
our computing Don Quixote. This is the
literature reflecting our fears, our super-
stitions, our anxious thoughts on tomor-
row's society. This mirror distorts. And,
unfortunately, distortion, being of nature
more interesting than simple reality, is
regarded as fact by the main body of our
society.

Our Mirror of Illusion is largely built of
the sands of misunderstanding -- the fear
of the machine's function and abilities.
This has been a popular theme in litera-
ture for almost a century now, and can be
traced through three aspects. Yet we do
not have a convenient Dr. Carrasco to hold
up the Mirror of Reality for society to
evaluate. Rather we must ask ourselves if
User Services can serve in this capacity.

The first aspect of this fear is the
apprehension of the future and the anxiety
about the unknown. As expressed in E. M.
Forster's (1879-1970) short story, "The
Machine Stops," the fear is that human
beings will grow totally dependent upon
the machine for all their needs, physical,

emotional and mental, and that man will
lose his initiative. If the machine fails,
what then of man? In the futuristic time
of this story the people, having lost all
creativity and initiative, no longer move
from their control chairs -- a chair de-
signed with a panel of buttons. The but-
tons summon valet service, communications,
and in that isolated world the machine is
their servant, yet they have become en-
slaved to it.

The second aspect is the confrontation
between man and machine become sentient.
In Arthur C. Clarke's novel, 2001: A Space
Odyssey, the Hal computer goes rogue and
has virtual control over the lives of the
men with whom it had previously worked. It
even commits the ultimate crime against
mankind -- "Hal" kills a man to protect its
reign, an action negating Asimov's Three
Laws of Robotics. However, this computer
is not yet all-powerful, and man does
triumph. Here too is the personification
of the computer (called Hal and possessing
a human-like voice) as an individual living
entity with likes and dislikes.

The computer that cannot be stopped is the
third aspect in the development of the fear
of computers. In D. F. Jones' novel,
Colossus: The Forbin Project, the computer
becomes omnipotent and omniscient and takes
control of people's daily lives, thus com-
pleting the circle of the machine as an
all-knowing, all-powerful god image ex-
pressed in the "The Machine Stops."
Colossus remains an "it" and it, too, com-
mits the ultimate crime -- it murders
humans, threatens them, invades their pri-
vacy, manipulates their lives, thus strip-
ping away their humanity.

This opponent of fear and anxiety, half-
truths and myths is a powerful one for User
Services to face. Yet face this giant we
must. But how? Obviously, we cannot
destroy the books, nor can we erase these
concepts from the minds of the populace.
What then should we do? Several sugges-
tions are offered below.

--The staff of User Services must view itself as an educator. The public must be educated and shown that the computer is not all-powerful, that it is basically stupid, that it is man-made, man-controlled, man-operated, and thus fallible, susceptible to the errors and eccentricities of man. Special emphasis must be given to the fact that the computer is not alive, that it is not a person, that it is not a he or a she. It is simply an "it."

--In that capacity what may be accomplished? Classes informing the public of the capabilities -- and limitations -- of computers should be arranged. These should without fail be small and informal, always stressing the personal touch, rather than the impersonal, which is identified with the facelessness of the computer.

--Open Houses should be organized. These should be held at the university computing centers to show the interested public the offices and work areas of the staff, the hardware of the computer. Here also is the ideal time to stress the simplicity of the computer. Informally instruct the public in a few basic terminal commands; allow them to sit down and work with it, perhaps even play some computer games. Let them see that the computer can be fun; that it needn't be menacing. Also show that the machine can "draw" pictures and "write" poetry -- something that is "artistic" cannot be all bad. Yet obviously it is not the quality artwork or creativity of a human -- no fear should be aroused on that point.

--Have traveling groups go out into the schools, from elementary level through senior high school. These groups would show the children the usefulness of the computer -- how it frees people from tedious and repetitious chores, allowing them more free time for creative, thoughtful work. User Services must also emphasize that the computer will not do "everything" for humans, nor will it take jobs away from humans. Small dial-up terminals could be taken to the schools, so that the students could see the assessibility and simplicity involved in basic computing.

--Above all, the staff of User Services must act as a translator for both computing personnel and the public at large. Computing vocabulary is comprised largely of bewildering acronyms, annoying buzz words, borrowed and redefined words -- little of it understood by the citizen in the street. And nothing is designed to alienate someone faster than the seemingly insurmountable barrier of language. To the computer layperson computerese appears completely unlearnable. Yet, many computer words have already slipped into our daily language: input, output, downtime, bug, turnaround, database and default, among many others. In this area User Services fits in well, for it must work with both the public and with the programmers, and thus must understand and be facile with both languages.

Thus, in the long run, User Services must serve in two capacities: as educator and translator.

There is no easy solution to this problem of misunderstanding and fear. It cannot be solved overnight, perhaps not even in a decade. People will not suddenly realize the computer is dumb, a handy tool and not all-encompassing. But rather than allowing this ignorance toward computers to continue to grow, User Services must stem the flow of fear and misunderstanding, be a dam to distortion. In the end, User Services must show the public the two mirrors, the one of the Illusion, the other of Reality. And the Mirror of Illusion must be shattered. Ultimately, User Services must serve as intermediary between man and machine.

REFERENCES

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